

CHORD REFERENCE

TWO

Part One dealt with music theory in a general way, and did not relate the material specifically to the mountain dulcimer. In fact, it's quite impossible to play most of the examples contained in that section on a standard diatonic dulcimer. Part Two and the Appendix, in contrast, are hands-on, dulcimer specific sections.

Chord Reference is a means of determining all possible ways to play a particular chord in all areas of the mountain dulcimer fingerboard. This section will describe in detail how this system works so that you can keep your own reference charts, according to individual needs. Let us try to approximate a definition of Chord Reference so we can get an idea of how valuable it can be to arranging, composing, and improvising music on the dulcimer.

First of all, Chord Reference is a system of thoroughly learning **how the fingerboard works**, so you can quickly recognise important patterns and relationships of notes. It is amazing how much you can learn from an accurate graphic representation of the dulcimer fingerboard. I have been using these charts for over 15 years as of this writing and I have found them to be invaluable.

Secondly, Chord Reference offers a means of establishing a body of **reference charts** according to specific individual needs. For instance, if you are interested in scoping out certain chords on the fourstring (equidistant) dulcimer in an unusual tuning, this Chord Reference system allows you to write your own encyclopedia on this very topic. Compiling your own reference charts is a rewarding experience which will enable you to gain a great deal of confidence in your musical abilities.

Finally, and to sum up our definition, Chord Reference serves as a profound, all-encompassing **aerial view of the fingerboard**. It is like a satellite photograph, in that it reveals familiar landscape from a unique, refreshing perspective.

From all this you can probably see some real advantages to learning Chord Reference. From my own experience, the real benefits have shown up in the creative side of my playing—especially with improvising (really just a fancy word for making it up as you go).



Fingerboard Surveys and Chord Formulas

The chord formula for a certain chord is like a recipe which contains the necessary ingredients (itches) for that chord.

D	F#	A
R	3	5

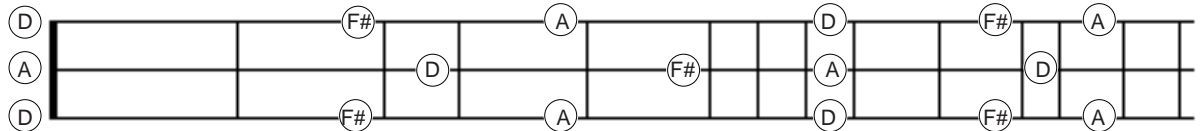
The formula for a D Major Triad is D, F#, A [Root (R), 3rd, 5th].

We can make three different types of fingerboard surveys in each chord category. Each one of these surveys may be compared to a lens through which the entire fingerboard may be viewed, and each has aspecial focus.

D Major Triad
complete chord formula:
Pitch name, top line;
interval, below

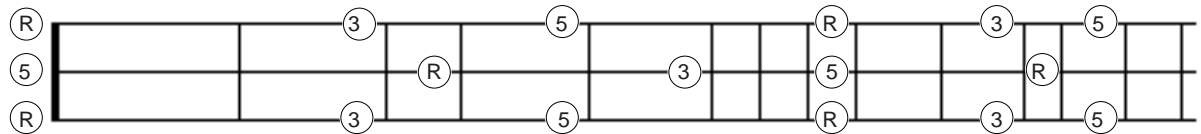
Type 1—PITCH SURVEY, D Major Triads

The **Pitch Survey** plots all possible locations of the pitches in a chord formula, and labels each location with the name of the note. All locations of D, F#, and A on the fingerboard are shown .



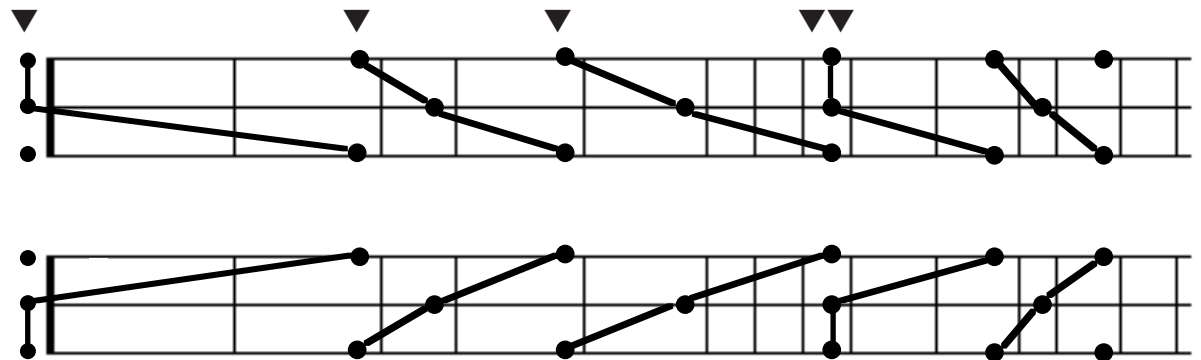
Type 2—INTERVAL SURVEY, D Major Triads

The second survey type is an **Interval Survey**, and shows the relationship of each note to the root or home tone (the first note in the chord, from which it takes its name).



Type 3—CONSTELLATION, D Major Triads

The third fingerboard survey type is a **Constellation**. It locates the ingredients of a chord formula with dots, which make it easy to see regular visual patterns like star formations. **Complete chords have three forms or patterns that repeat in sequence.** Below, arrows mark the beginning of each of the three patterns, and a double arrow marks the beginning of the repeat cycle.

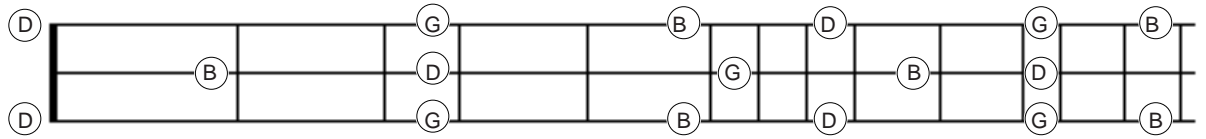


An interesting and useful aspect of this tuning is that every triad form can be inverted by trading melody-string and bass-string notes and can be pivoted on the unchanging middle string note. This is possible because the melody and bass string share the same note (D) an octave apart (d and d'). The two constellation diagrams show this mirror pattern; each of the notes located in the Pitch Survey has a place in one of the three movable forms.

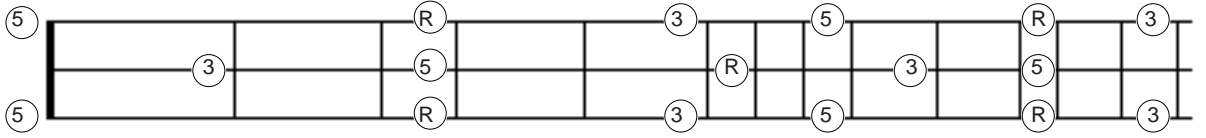
G	B	D
R	3	5

Chord Reference: G Major

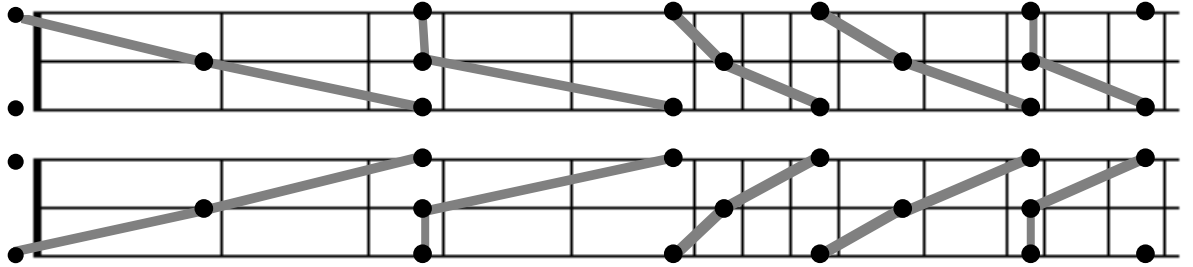
Pitch survey



Interval survey



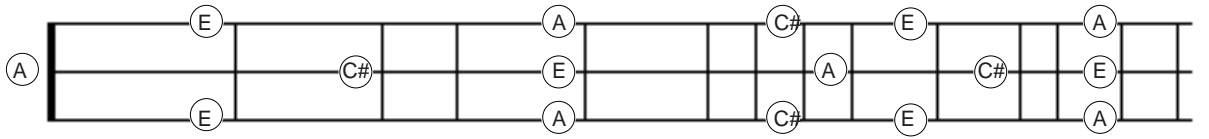
Constellations
a. and b.



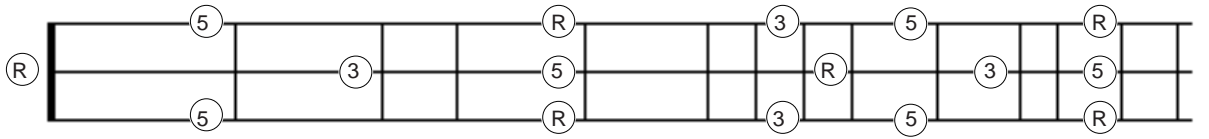
A	C#	E
R	3	5

Chord Reference: A Major

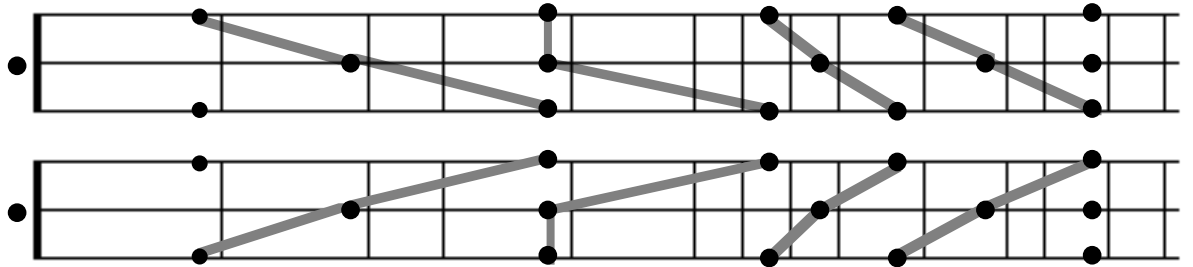
Pitch survey



Interval survey



Constellations
a. and b.



Tuning D-A-D

Chord tablature: G Major

G Major Complete Triads

Constellations a.
and b.

D	0	3	5	7	3	5	7	10		
A	1	3	6	8	1	3	6	8		
D	3	5	7	10	0	3	5	7		

Arpeggios

D			0				3				5	
A		1		1		3		3		6		6
D	3				5				7			

G Major Complete Triads Using Open Strings

D	0	5	0	10				
A	6	6	8	8				
D	5	0	10	0				

G Major Partial or Incomplete Chords Using Open Strings.

D	0	0	0	0	0	0	0	0	0	3	3	5	5	7	7	10	10	
A	1	1	3	3	6	6	8	8	10	1	1	3	3	6	6	8	8	10
D	0	3	3	5	5	7	7	10	10	0	0	0	0	0	0	0	0	

	0	0	0	0	0	0	0	0	0	3	5	7	10			
	1	3	6	8	10	13		1	3	6	8		1	3	6	8
	0	0	0	0	0	0		3	5	7	10		0	0	0	0

	0	0	0	0	0	3	5	7	10	10		
	1	3	6	8		1	3	6	8	8	10	
	0	3	5	7		0	0	0	0	0	0	

Chord tablature: A Major

A Major Complete Triads

Constellations a.
and b.

D	1	4	6+	8	4	6+	8	11
A	2	4	7	9	2	4	7	9
D	4	6+	8	11	1	4	6+	8

Arpeggios.

D			1			4			6+		8	
A		2		2		4		4		7		7
D	4				6+		8					11

A Major Complete Triads Using Open Strings

D	6+	8		
A	0	0		
D	8	6+		

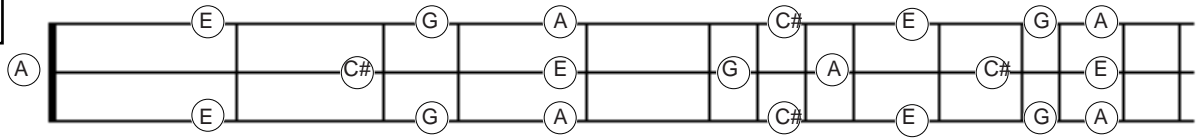
A Major Partial or Incomplete Chords Using Open Strings.

D	1	1	4	4	4	6+
A	0	0	0	4	0	0
D	1	4	1	4	6+	4

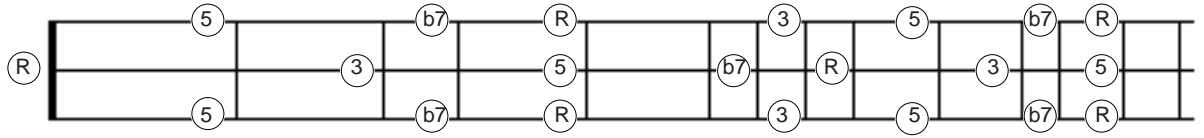
A	C#	E	G
R	3	5	b7

Chord Reference: A Seventh (A7)

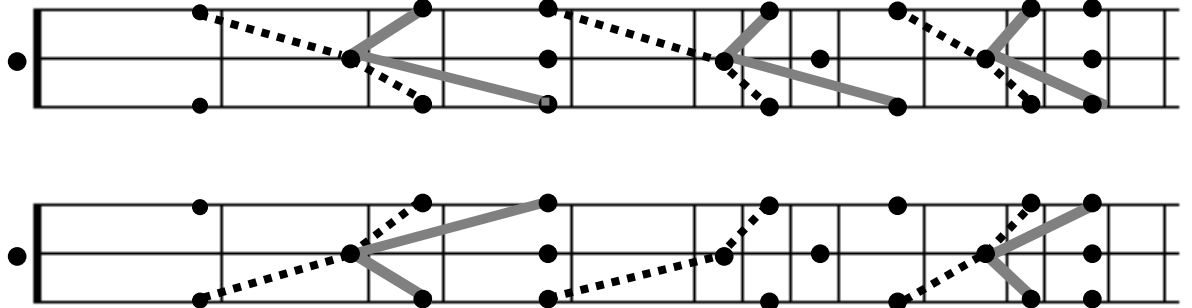
Pitch survey



Interval survey



Constellations
a. and b.



Tuning D-A-D

Chord tablature: A Seventh (A7)

A Seventh Chords (Movable forms, consecutively higher)

Constellations
a. and b.

D	1	3	4	6+	8	10	3	4	6+	10	11
A	2	2	6	6	9	9	2	2	6	9	9
D	3	4	6+	8	10	11	1	3	4	8	10

Partial or Incomplete A Seventh Chords

D	1	3	4	3	3	4	6+	6+	6+	8	10
A	0	0	4	4	2	6	6	6	0	0	0
D	3	1	3	4	4	6+	4	8	8	10	8

Moving through various Partial A Major and A Seventh Chords with open middle string:

D	1	1	3	4	4	6+	6+	8	8	1	3	4	4	6+	6+	8	8	10
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D	1	3	4	4	6+	6+	8	8	10	1	1	3	4	4	6+	6+	8	8

	1	3	4	6+	8	10					
	0	0	0	0	0	0					
	1	3	4	6+	8	10					

A Seventh Chords. There are four notes in the formula for a Dominant Seventh Chord (R, 3, 5, flat 7). Obviously, on a three-string mountain dulcimer, it's impossible to play a complete A Seventh chord—one of the ingredients has to go. Which one, then, do we leave out?

If we leave out the 5th (E) we're left with a Root (A), 3rd (C#), and a flat 7 (G). This gives us a tense, anxious, A Seventh chord that really wants to resolve back into the I chord (D). For a less tense, more stable A Seventh, leave out the 3rd (C#), so the chord is left with the Root (A), the 5th (E), and the flat 7 (G).